CIVIL TECH LABS

Accredited by **NABL** as per ISO/ IEC 17025 : 2005

5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027

Ph: 080 - 4114 2867 / Mob. : 96862 31801, Email: civiltechlabs@gmail.com

T-2654

To,

Assistant Executive Engineer,
Yelahanka Satellite Sub Division,
BBMP.

29th March 2016

Dear Sir,

Sub: Improvements of roads and drains at 3rd phase in ward no. 04, Yelahanka New Town Sub Division.
Testing of cubes – Reg.

As requested the 28th day Compressive Strength Test of Cubes was carried out for the above work for the samples supplied by you.

Please find the enclosed Test Reports of the above.

Thanking you,

For Civil Tech Labs,

Khushboo

CIVIL TECH LABS BANGALORE

(KHUSHBOO L.)
Quality Manager

Forwarded AE

D o/y

CIVIL TECH LABS

5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027
Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Yelahanka Satellite Sub Division, BBMP
Name of Work	Improvements of roads and drains at 3rd phase in ward no. 04, Yelahanka New Town Sub Division
Name of Agency	Sri. Y. B. Ramesh
Grade of Concrete	M-20
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg. Compressive Strength (N/mm^2)
1	Sample 1	150.28 X 150.30 X 150.0	22587	01/03/2016	29/03/2016	28	8.17	475	21.11	21.41
2		150.32 X 150.34 X 150.0	22599				8.19	480	21.33	
3		150.33 X 150.31 X 150.0	22596				8.22	490	21.78	

Note:

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3. Any correction invalidates this report.
4. The results are based on the test conducted on samples supplied by the customer.

(KHUSHBOO L)
Quality Manager

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Yelahanka Satellite Sub Division, BBMP
Name of Work	Improvements of roads and drains at 3rd phase in ward no. 04, Yelahanka New Town Sub Division
Name of Agency	Sri. Y. B. Ramesh
Grade of Concrete	M-20
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	Sample-2	150.25 X 150.27 X 150.0	22578	01/03/2016	29/03/2016	28	8.19	480	21.33	21.63
2		150.26 X 150.28 X 150.0	22581				8.20	485	21.56	
3		150.31 X 150.27 X 150.0	22587				8.22	495	22.00	

Note:

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Dayanand A

(KHUSHBOO)
Quality Manager

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Yelahanka Satellite Sub Division, BBMP
Name of Work	Improvements of roads and drains at 3rd phase in ward no. 04, Yelahanka New Town Sub Division
Name of Agency	Sri. Y. B. Ramesh
Grade of Concrete	M-20
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	Sample-1	150.22 X 150.24 X 150.0	22569	01/03/2016	29/03/2016	28	8.16	475	21.11	21.48
2		150.25 X 150.23 X 150.0	22572				8.18	485	21.56	
3		150.24 X 150.26 X 150.0	22575				8.20	490	21.78	

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Dy award AE

(KHUSHBOO L)
Quality Manager

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T-2654

To,

Assistant Executive Engineer,
Yelahanka Satellite Sub Division,
BBMP.

29th February 2016

Dear Sir,

Sub: Testing of Materials.

As requested, tests on physical properties were carried out for the Materials supplied by you, for the work of **'Improvements of roads and drains at 3rd phase in ward no. 04, Yelahanka New Town Sub Division.'**

Please find the enclosed Test Reports of the above.

Thanking You,
For Civil Tech Labs

Khushboo

CIVIL TECH LABS BANGALORE

(KHUSHBOO L.)
Quality Manager

Forwarded AE

CIVIL TECH LABS

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TEST REPORT

TESTS ON REINFORCEMENT STEEL BAR 10mm

Name & Address of the Customer	AEE, Yelahanka Satellite Sub Division, BBMP
Name of Work	Improvements of roads and drains at 3rd phase in ward no. 04, Yelahanka New Town Sub Division
Name of the Agency	Sri. Y. B. Ramesh
Date of Testing	29/02/2016
Grade and Brand of Steel	Fe - 550

Sl.No.	Description	Result	IS 1786-2008 Min. Requirements	Remarks
1	Measured Diameter mm	10	10	Satisfactory
2	Wt/m Length (Kg/m)	0.618	0.617	Satisfactory
3	Bend & RebendTest	Pass	Should not Crack or Fracture	Satisfactory
4	Elongation (%)	9.1	8	Satisfactory
5	Yield Stress(N/Sq.mm)	559	550	Satisfactory
6	U T S (N/Sq.mm)	595	585	Satisfactory

Note:

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3. Any correction invalidates this report.
4. The results are based on the test conducted on samples supplied by the client.

Dayanand AE

(KHUSHBOO L.)
Quality Manager

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TEST REPORT

TESTS ON REINFORCEMENT STEEL BAR 12 mm

Name & Address of the Customer	AEE, Yelahanka Satellite Sub Division, BBMP
Name of Work	Improvements of roads and drains at 3rd phase in ward no. 04, Yelahanka New Town Sub Division.
Name of the Agency	Sri. Y. B. Ramesh
Date of Testing	29/02/2016
Grade and Brand of Steel	Fe - 550

Sl.No.	Description	Result	IS 1786-2008 Min. Requirements	Remarks
1	Measured Diameter mm	12	12	Satisfactory
2	Wt/m Length (Kg/m)	0.889	0.888	Satisfactory
3	Bend & RebendTest	Pass	Should not Crack or Fracture	Satisfactory
4	Elongation (%)	9.6	8	Satisfactory
5	Yield Stress(N/Sq.mm)	564	550	Satisfactory
6	U T S (N/Sq.mm)	600	585	Satisfactory

Note:

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Dayanand AE

(KHUSHBOO L.)
Quality Manager

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TEST REPORT

TESTS ON REINFORCEMENT STEEL BAR 16 mm

Name & Address of the Customer	AEE, Yelahanka Satellite Sub Division, BBMP
Name of Work	Improvements of roads and drains at 3rd phase in ward no. 04, Yelahanka New Town Sub Division
Name of the Agency	Sri. Y. B. Ramesh
Date of testing	20/02/2016
Grade and Brand of Steel	Fe - 550

Sl.No.	Description	Result	IS 1786-2008 Min. Requirements	Remarks
1	Measured Diameter mm	16	16	Satisfactory
2	Wt/m Length (Kg/m)	1.60	1.58	Satisfactory
3	Bend & RebendTest	Pass	Should not Crack or Fracture	Satisfactory
4	Elongation (%)	10.2	8	Satisfactory
5	Yield Stress(N/Sq.mm)	569	550	Satisfactory
6	U T S (N/Sq.mm)	605	585	Satisfactory

Note:
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Khushboo

(KHUSHBOO L.)
Quality Manager

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TEST REPORT

GRADATION TEST ON COARSE AGGREGATES 20mm ↓ Graded

Name & Address of the Customer	AEE, Yelahanka Satellite Sub Division, BBMP
Name of Work	Improvements of roads and drains at 3rd phase in ward no. 04, Yelahanka New Town Sub Division
Name of Agency	Sri. Y. B. Ramesh
Date of Testing	29/02/2016
Specific Gravity	2.64
Water Absorption	0.30%
Technical Reference	IS : 2386(Part I)-1963 (Reaffirmed 2011), IS : 2386 (Part III)-1963 (Reaffirmed 2011)

IS Sieve Designation (mm)	Sieve Analysis (% Passing IS Sieve)	Grading Requirement as per IS:383-1970 (Reaffirmed 2011)	Remarks
40	100	100	Satisfies the requirement
20	97.8	95-100	
10	42.5	25-55	
4.75	8.2	0-10	

Note:

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Dayanand K

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Quality Manager

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TEST REPORT

GRADATION TEST ON COARSE AGGREGATES 40mm ↓ Graded

Name & Address of the Customer	AEE, Yelahanka Satellite Sub Division, BBMP
Name of Work	Improvements of roads and drains at 3rd phase in ward no. 04, Yelahanka New Town Sub Division.
Name of Agency	Sri. Y. B. Ramesh
Date of Testing	29/02/2016
Specific Gravity	2.67
Water Absorption	0.28%
Technical Reference	IS : 2386(Part I)-1963 (Reaffirmed 2011), IS : 2386 (Part III)-1963 (Reaffirmed 2011)

IS Sieve Designation (mm)	Sieve Analysis (% Passing IS Sieve)	Grading Requirement as per IS:383-1970 (Reaffirmed 2011)	Remarks
80	100	100	Satisfies the requirement
40	98.3	95-100	
20	53.2	30-70	
10	24.9	10-35	
4.75	4.1	0-5	

Note:

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Dayanand AE.

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Quality Manager

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TEST REPORT

GRADATION TEST ON FINE AGGREGATES

Name & Address of the Customer	AEE, H. A. L. Airport Sub Division, BBMP
Name of Work	AEE, Yelahanka Satellite Sub Division, BBMP
Name of Agency	Improvements of roads and drains at 3rd phase in ward no. 04, Yelahanka New Town Sub Division.
Date of Testing	29/02/2016
Specific Gravity	2.56
Technical Reference	IS : 2386(Part I)-1963 (Reaffirmed 2011), IS : 2386 (Part III)-1963 (Reaffirmed 2011)

Sample	IS Sieve designation (mm)	Sieve Analysis (% Passing IS Sieve)	Grading Requirement as per IS:383-1970 (Reaffirmed 2011)				Grading Zone	Remarks
			ZONE-I	ZONE-II	ZONE-III	ZONE-IV		
River Sand	10	100	100	100	100	100	II	Satisfies the requirement
	4.75	97.8	90-100	90-100	90-100	95-100		
	2.36	85.6	60-95	75-100	85-100	95-100		
	1.18	74.2	30-70	55-90	75-100	90-100		
	0.6	47.8	15-34	35-59	60-79	80-100		
	0.3	24.6	5-20	8-30	12-40	15-50		
	0.15	8.4	0-10	0-10	0-10	0-15		

Note:

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Dayanand. AE

(KHUSHBOO L)
Quality Manager

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TEST REPORT

TEST ON CEMENT

Name & Address of the Customer	AEE, Yelahanka Satellite Sub Division, BBMP
Name of Work	Improvements of roads and drains at 3rd phase in ward no. 04, Yelahanka New Town Sub Division.
Name of the Agency	Sri. Y. B. Ramesh
Date of Testing	29/02/2016

Tests	Test Method As Per IS & Apparatus		Results		Requirements As Per IS 8112:1989	Remarks
	IS Code	Method	Value	Unit		
Initial Setting Time	IS-4031 (Part-5) 1988	VICAT	53	min	Not Less Than 30 Minutes	Satisfies Requirement
Final Setting Time	IS-4031 (Part-5) 1988	VICAT	481	min	Not More Than 600 Minutes	Satisfies Requirement
Soundness	IS-4031 (Part-3) 1988	LE-CHATELIER	4	mm	Not More Than 10 mm	Satisfies Requirement

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